

SCOLYTIDAE AND PLATYPODIDAE

CONTRIBUTION 49

NEW SPECIES FROM AUSTRALIA AND THE FIJI ISLAND
WITH SOME REVISIONAL NOTES

By KARL E. SCHEDL

[Read 14 April 1938]

In my first paper on the Australian Fauna⁽¹⁾ I neglected most of the Cryphalinae and merely recorded others. Since then the South Australian Museum has kindly placed more types at my disposition, which now affords me the opportunity to publish more on some of these very difficult species.

Other material I have received from the Imperial Institute of Entomology in London, the Dominion Museum at Wellington, New Zealand, and the Museum Royal d'Histoire Naturelle de Belgique at Bruxelles. Some of the original descriptions are so brief that determination necessitates a more detailed description, aside from some illustrations. Both shall be given below. From all the more difficult specimens balsam mounts of the antennae have been prepared.

HYLESINUS CORDIPENNIS Lea

Aside from the type, I have not seen any specimens. *Cordipennis* is a true *Hylesinus*, 3.3 mm. long, 1.7 times as long as wide, widest at the middle, oval in outline, the apical margin of the pronotum and the elytra broadly and similarly rounded. Elytral interstices with inconspicuous short and dark scales.

Leperisinus tricolor, n. sp.

A bright coloured species, 3.1 mm. long, 2.1 times as long as wide. Easily separated from the other Australian species, *L. bimaculatus* m., by its size and vestiture.

Front opaque, convex, densely granulate punctate, with short, rather dense and yellow pubescence, a shallow transverse impression just above the epistomal margin.

Pronotum wider than long (40:32), base bisinuate, postero-lateral angles rectangular, strongly rounded, sides feebly arcuate, subparallel on the basal half, strongly constricted in front, anterior margin moderately broadly rounded, disc with a strongly developed transverse impression along the anterior constriction, otherwise feebly convex, densely covered with short, small and dark reddish-brown scales, intermixed with scattered larger and pale yellowish ones, these more numerous along the median line behind and on the postero-lateral corners on each side of the median line with a dark semi-circular marking.

(1) Thirty-fifth Contribution, Records of the South Australian Museum, 5, (4), 1936, 513-535

Elytra wider (49:40) and 2.1 times as long as the pronotum, each elytron broadly arcuate at the base, sides parallel up to the middle, then gradually narrowed, apex rather narrowly rounded, declivity commencing at the middle, gradually and somewhat obliquely declivous; striate punctate, striae very narrow, punctures indistinct, interstices feebly convex, densely covered with scales of different colour, each interstice also with a somewhat irregular double row of larger erect scales, ground colour a deep dark reddish-brown, with three wavy transverse and brighter coloured bands, the first near the base indistinct, produced by pale yellowish top scales only, the second more distinct, top and ground scales of the same colour, the third broad, on the declivital convexity and laterad abruptly ceasing, of a reddish-brown colour, another patch of similar colouration along the suture and on the sides behind.

Type in the author's collection.

Locality—Australia.

Hyleops, new genus

True *Hylesinidae* of the general shape as in some species of *Leperisinus* Reitter, with 7-segmented antennal funicle (fig. 1), large elongate 3-segmented

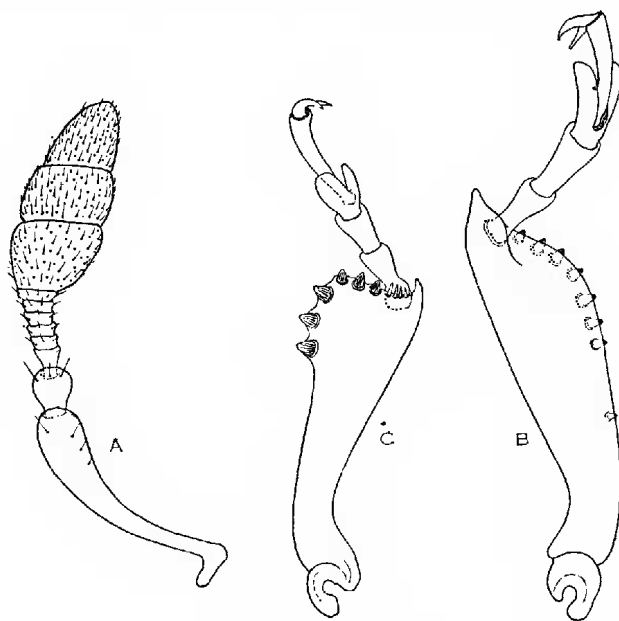


Fig. 1.

- A: *Hyleops glabratus*, n. sp., antenna
 C: Anterior tibia, *Leperisinus tricolor*, n. sp.
 B: Ditto, *Hyleops glabratus*, n. sp.

antennal club, long oval eyes, finely and uniformly sculptured pronotum, striate-punctate elytra and ascending abdominal sternites. Characters which do not permit including it in any of the known genera are: the absence of scale-like vestiture on the pronotum and elytra, and especially the development of the front

tibiae. The latter is widened distally, strongly compressed, with a series of small equal-sized serrations on the outer margin. All allied genera show at least on the front tibiae several large teeth on the apical edge. The groove for the reception of the tarsus is short and subtransverse, the front coxae are moderately remote.

***Hyleops glabratus*, n. sp.**

Female—Dark reddish-brown, 3.4 mm. long, 2.2 times as long as wide.

Front convex, subshining below, opaque above, with a very shallow semi-circular impression in the lower half, very densely and very finely punctured, with fine and inconspicuous pubescence.

Pronotum wider than long (15:10), widest in the basal third, base as in the allied genera strongly bisinuate, postero-lateral angles rectangular, feebly rounded, sides parallel on the basal third, obliquely narrowed in front, the anterior constriction hardly noticeable, apical margin moderately broadly rounded, disc feebly convex, without distinct impressions, very densely and very finely punctured, pubescence inconspicuous, pale yellowish and hair-like, median line hardly noticeable.

Elytra feebly wider and more than twice as long as the pronotum, sides parallel on more than the basal half, broadly rounded behind, declivity commencing at the middle, very gradually and somewhat obliquely declivous; disc shallowly striate-punctate, the punctures rather small, shallow and indistinct on the sides, the first row moderately the other feebly impressed, interspaces subconvex, shining, irregularly and rather densely punctured, between the punctures finely wrinkled, the general appearance rather rough; declivity with the second interspace impressed, suture and third interstice elevated, each with a row of four to five tubercles, those of the third interspace larger; pubescence of the elytra dark and short, underside of the beetle covered with pale short and stout scales.

Male—Somewhat larger, the front broadly and shallowly concave, below the centre of the concavity and along the epistomal margin minutely reticulate, densely finely punctured above; pronotum with the anterior constriction more distinct, the elytra stouter, the declivity more oblique, the second interstice deeper and impunctate, the tubercle on the suture and third interstice decidedly larger, the entire declivity brightly shining, on the interspaces without puncturation.

Types in the Imperial Institute of Entomology and in the author's collection.

Locality—Nanango, Queensland, 14 September 1936, bred from Hoop Pine, A. R. Brimblecombe.

***Phloesinus australis*, n. sp.**

Reddish-brown, 2.2 mm. long, 2.0 times as long as wide. The third species from the Australian Region. Easily recognised by its sculpture.

Front convex, transversely depressed below, finely granulate-punctate, less dense along the median line above epistomal margin; antennae as shown in fig 2.

Pronotum wider than long (33:26), widest at the base, the latter strongly bisinuate, postero-lateral angles rectangular, not rounded, sides broadly arcuate and feebly narrowed on the basal two-thirds, very strongly constricted in front,

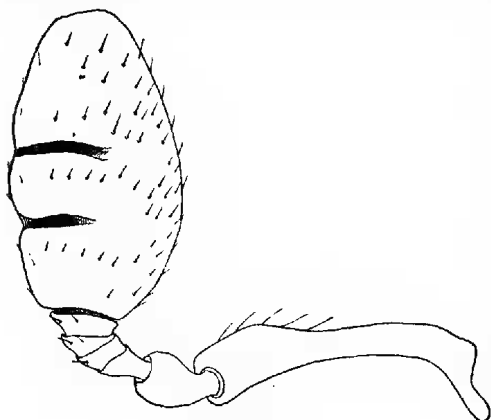


Fig. 2

Phloeosinus australis, n. sp., antenna.

the punctures more distinct, interspaces higher, the punctures replaced by good-sized tubercles, the second interstice without such and feebly impressed, pubescence short and yellowish.

Type in the author's collection.

Locality—Australia.

PACHYCOTES Sharp.

(Ent. Month. Mag., 14, 1877, 10)

Redescription of the Genus

General shape long cylindrical, very similar to that in the genera *Dendroctonus* Er., *Hylurgus* Latr. and *Blastophagus* Eichh.

Front convex, more or less transversely impressed, the rostrum short and stout, antennal funicle 7-segmented, club pear-shaped, not at all compressed, 4-segmented.

Pronotum rather feebly convex, anteriorly with a well-developed constriction, usually with a well-defined impunctate smooth median line, sculpture uniform all over, punctate.

Elytra cylindrical, declivity convex, rather coarsely sculptured, ninth interspace carinate and serrate in the posterior half, projecting over the lateral margin, declivity usually with two types of vestiture, short, stout and densely placed scales and long stiff bristles. Tibiae triangularly widened distally, with apical teeth, abdominal sternites II-IV as long as V or II.

PACHYCOTES (HYLESINUS) PEREGRINUS Chap.

= *Pachycotes ventralis* Sharp

Chapuis' type is dark reddish-brown, 4.0 mm. long, 2.3 times as long as wide. Three specimens which I received from Dr. Clark, of the New Zealand State

Forest Service, and which apparently have been compared with Sharp's type, are somewhat larger, 4.8 mm. long, but otherwise agree in all respects with Chapuis' species.

Front convex, with a subcircular shallow impression between the eyes, the centre of it and the lower part of the median line polished and impunctate, remaining surface densely granulate-punctate. Epistomal process as in *Dendroctonus simplex* Lec.

Pronotum longer than wide (52:45), base strongly bisinuate, postero-lateral angles rectangular, feebly rounded, sides subparallel, then strongly narrowed, anterior constriction well developed, disc feebly convex, with a shallow transverse impression along the anterior constriction and a second one along the base, the latter more strongly developed on the sides; surface subshining, densely covered with large but shallow punctures, median line impunctate. Scutellum very small and shining.

Elytra hardly wider (58:52) and nearly twice as long as the pronotum, sides parallel, broadly rounded behind, declivity commencing behind the middle, evenly convex; disc deeply striate-punctate, striae punctures small and elongate, interspaces wide and convex, covered with densely placed transverse rugae; declivity with the striae punctures larger and more circular, the interspaces narrower, less convex, very finely and irregularly punctured and covered with very small scale-like hairs, each interstice also with a row of remotely placed small setose granules, the latter more strongly developed at the commencement of the declivital convexity.

The type is a male. The female has the front evenly convex, without the circular depression but with the median line finely carinate on the lower half.

***Pachycotes australis*, n. sp.**

Male—Piceous, 3.7 mm. long, 2.2 times as long as wide. Of the same general shape as the genotype, but somewhat stouter and with different sculpture.

Front, convex above, flattened and feebly concave below, epistomal margin developed into an oblique transverse strip, the upper limit strongly elevated, especially in the middle, median line narrowly carinate on its lower third, entire surface subshining, sparingly and finely punctured, the centre of the impression impunctate.

Pronotum wider than long (50:38), general shape as in *P. peregrinus* Chap., the punctures larger, intermixed with some smaller ones, shallow and disclosing the bottom, near the apex and along the median line the punctures becoming smaller, more remotely placed and with the outer margins asperity-like elevated.

Elytra as wide (52:50) and twice as long as the pronotum, opaque, in outline and general shape as in *P. peregrinus* Chap., the declivity more strongly convex; the striae punctures shining and circular throughout, smaller on the declivity, interstices more coarsely and less densely wrinkled on the disc, between the rugae with minute irregularly placed punctures, declivity with the

tubercles comparatively larger, the interspacial punctation very minute, the scales very densely placed.

The female is larger, 3.8 mm. long, somewhat more slender, the front dull, rather coarsely granulate-punctate, without median impression, but with an arcuate impressed line shortly above the similarly constructed epistomal margin; pronotum less strongly constricted in front, the sides more evenly rounded; the elytra with the rugae of the interspaces much coarser and comparatively fewer in number.

Types in the South Australian Museum, the Imperial Institute of Entomology and in the author's collection.

Locality—Dorrigo, New South Wales; Gallangowen, Queensland, ex Hoop Pine log, A. R. Brimblecombe, 18 January 1936.

***Pachycotes clavatus*, n. sp.**

Male—Piceus, 3.6 mm. long, 2.2 times as long as wide. The peculiar frontal characters, the insertion of the antennal funicle and the sculpture separate this species easily from its allies.

Front deeply concave on the greatest part, concavity extending from eye to eye, epistomal margin beak-like as in the two foregoing species but more strongly developed, in the concavity with four high transverse carinae, vertex and genae finely remotely punctured. Antennal scape (fig. 3) club-shaped, funicle inserted before the apex antennal club furnished with long bristles.

Pronotum wider than long (50:36), base bisinuate, postero-lateral angles rectangular, feebly rounded, sides arcuate and narrowed towards the apex, anterior constriction strongly developed, disc feebly convex, anterior transverse depression well developed, surface subshining, punctures small, remotely placed, rather irregular in size. Front and pronotum with scattered reddish hairs. Scutellum hardly visible.

Elytra as wide (53:50) and twice as long as the pronotum, with a rather strongly convex declivity; disc with the striae hardly impressed, stria punctures extremely small, somewhat larger but hardly more distinct on the declivity, interspaces subshining, less convex than in the two preceding species, the

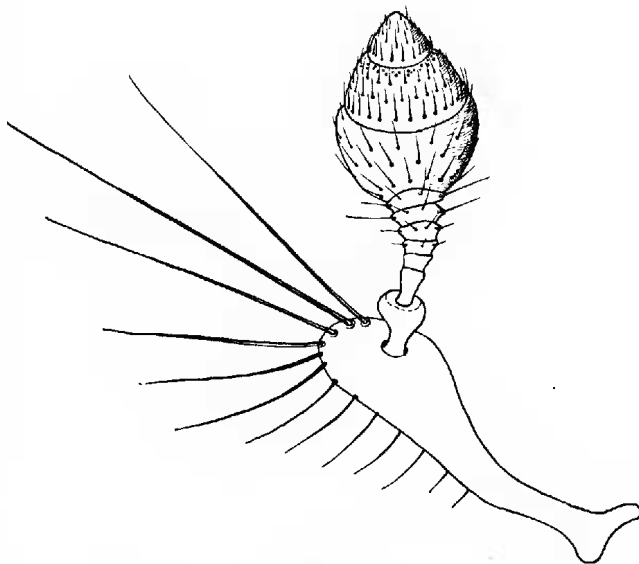


Fig. 3
***Pachycotes clavatus*, n. sp. antenna**

uniseriate setose granules larger and on the first three interspaces extending over the apical two-thirds, on the basal third with rather fine and moderately closely placed transverse rugae, the irregularly placed small interspaces punctures numerous, the scales not as densely arranged as in *P. australis* (abraded?), the declivital convexity slightly projecting over the apical margin.

Female with the front evenly convex, granulate-punctate, more strongly and densely so in the middle of the lower half, pronotum with the anterior constriction less distinct, elytra with the sculpture decidedly coarser.

Types in the Imperial Institute and in the author's collection.

Locality—Sydney (Imp. Inst.) and New South Wales.

Hylurdretonus, n. g.

General shape and outline similar as in *Hylurgus* Latr. and *Dendroctonus* Er., but with different antennae and rather remarkable sexual characters. Pronotum feebly convex, not margined behind, abdomen cylindrical, elytral declivity convex, first visible sternite not much longer than III, IV or II.

Antennae with the funicle 5-segmented, the club but little compressed, with three distinct segments (fig. 4), fore coxae widely separated, anterior tibiae widened distally, with numerous teeth on the outer margin, metepisternum visible on its entire length.



Fig. 4

Hylurdretonus pinarius, n. sp.
antenna

Hylurdretonus pinarius, n. sp.

Female—Piccus, 1.6 mm. long, 2.5 times as long as wide.

Front rather strongly convex, densely coarsely granulate-punctate, sparsely hairy. Eyes long oval, with a small emargination on both sides about in the middle.

Pronotum shining, as long as wide, base transverse, postero-lateral angles rectangular and feebly rounded, sides straight and feebly convergent on the basal two-thirds, with a distinct anterior constriction, broadly rounded in front; feebly convex, with a transverse depression short behind the anterior margin, moderately coarse and sparsely (especially along the median line) punctured on the disc, more densely so along the transverse depression, roughly granulate on the sides, pubescence very sparse; scutellum small, triangular.

Elytra wider (21:19) and 1.7 times as long as the pronotum, widest in the posterior half, sides subparallel, broadly rounded behind; declivity commencing behind the middle, evenly rounded; disc striate-punctate, the punctures coarse, closely placed and decreasing in size from the base to the declivity, interspaces

shining, moderately wide, each with a row of smaller punctures, puncturation confused near the base, each interspace bearing a small erect reddish hair; declivity with the striae punctures obscure, first and second striae indicated by feebly impressed lines; second interstice feebly impressed, interstices one to three with a regular row of very fine granules, aside from these finely densely and irregularly punctured, the pubescence according to the puncturation very dense but much shorter than on the disc.

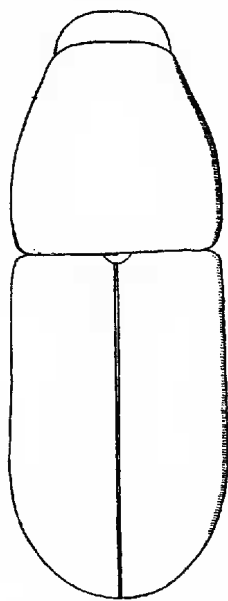


Fig. 5
Hylurdirectonus
piniarius, n. sp.
dorsal aspect ♀

Male—Somewhat stouter and more shining.

Front convex, with a triangular depression below, which is impunctate along the median line.

Pronotum as in the female.

Elytra with the first striae strongly impressed on the disc, punctures not visible, the other rows not impressed, the punctures small and remotely placed, interspaces wide, each with a few rather irregularly-placed punctures of varying size, these more regular in arrangement, larger and deeper on the sides (interspaces 5 to 9); declivity more oblique, commencing in the middle, suture and third interstice broadly elevated, each with a row of large but remotely placed granules, interspaces polished, each with very scattered and minute punctures, the second broadly impressed, striae punctures not recognisable,

pubescence according to the puncturation of the interspaces extremely sparse and short.

Types in the Imperial Institute and in my collection.

Locality—Queensland, A. R. Brimblecombe, Yarraman, February, 1934, from axes of Hoop Pine cones.

LETZNERELLA (CRYPHALUS) TRICOLOR Lea

Redescription of Type—Reddish-brown, 1.4 mm. long, 2.3 times as long as wide. The antennae (fig. 6) and the sculpture of the elytra refers this species to the genus *Letznerella* Reitt. The genus *Ernoporides* Hopkins with *Cryphalus jalappae* Reitt. as genotype is synonymous with *Letznerella* Reitt. and has to be withdrawn.

Front convex, densely granulate-punctate, subshining above, rather opaque and nearly black below.

Pronotum wider than long, base feebly bisinuate, postero-lateral angles rectangular and distinctly rounded, broadly arcuate in front, summit at the middle,

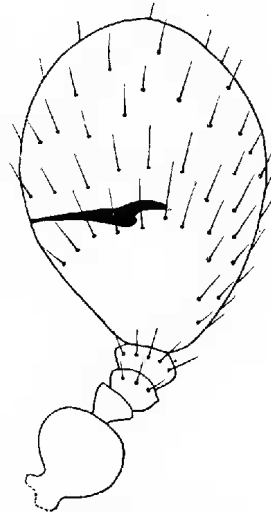


Fig. 6
Letznerella (Cryphalus)
tricolor Lea, antenna

anterior margin armed with numerous pointed and recurved asperities, anterior area asperate, the first asperities arranged in broken concentric ridges, more crowded and irregularly placed around the summit, posterior area densely punctured, from each puncture arising a short blunt yellowish scale.

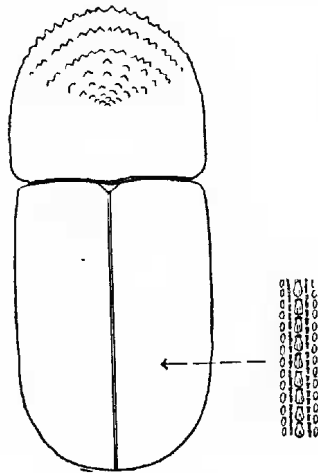


Fig. 7

Letznerella (Cryphalus) tricolor Lea
dorsal aspect and elytral detail

Elytra but little wider and not quite twice as long as the pronotum, sides parallel on the basal half, broadly rounded behind, declivity commencing shortly behind the middle, evenly convex; striate-punctate, striae but feebly impressed, stria punctures moderate in size, interspaces flat, each with a row of large and blunt pale yellow scales, each such row of scales bordered on each side by a row of much smaller, more slender and more hair-like scales, the development of scale vestiture on the declivity more distinct than on the disc.

I have seen a good series of this species in the material of the Imperial Institute of Entomology, of which the labels say: Queensland, per

R. Veitch, on *Melittia megasperma*, Imbil, on native Wistaria, R. Brimblecombe, 24 November 1936.

Erioschidias, n. g.

General shape as in most *Cryphalinae*, antennal funicle 3-segmented (fig. 8), club very large, with the sides evenly rounded, without sutures or septa on either side but with scattered pores and setae. Pronotum with the anterior margin armed by asperities. Anterior coxae touching, anterior tibiae with numerous teeth imbedded in well-developed sockets. Metepisternum largely covered by the elytra.

ERIOSCHIDIAS (CRYPHALUS) SETISTRIATUS Lea

Redescription of the Type—Piceus, 1.4 mm. long, 2.5 times as long as wide.

Front plano-convex, feebly transversely depressed below, with faint scratches radiating out from the middle of the epistomal margin, very finely punctulate. Eyes rather large, shortly oval, with a distinct emargination in front.

Pronotum as long as wide, widest in the basal third, base finely margined and feebly bisinuate, postero-lateral angles obtuse, not rounded when viewed from

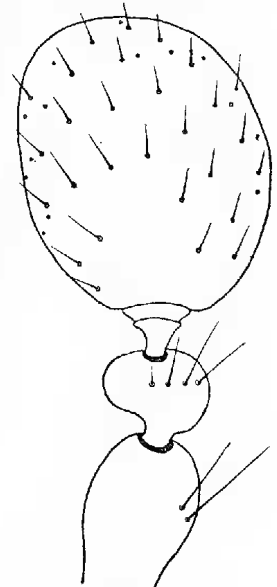


Fig. 8

Erioschidias (Cryphalus) setistriatus Lea, antenna

above, sides gradually rounded to the apex, anterior margin with two small asperities medially, summit in the middle, with a distinct transverse depression behind it, anterior area moderately steeply convex, densely covered with low more or less tubercle-like asperities, these assume the appearance of granules

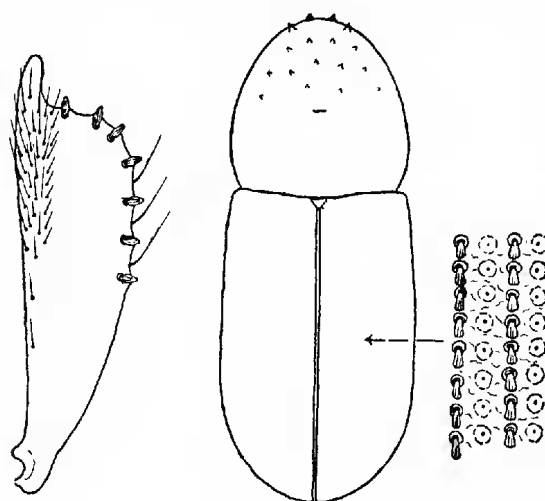


Fig. 9

Erioschidias (Cryphalus) setistriatus Lea,
dorsal aspect of the adult beetle, detail of
elytral sculpture and fore tibia

towards the posterior half of the pronotum, the entire surface giving the impression of being densely coarsely granulate, covered with small yellowish scales.

Elytra but little wider (47:43) and 1.6 times as long as the pronotum, widest in the middle, sides subparallel, moderately broadly rounded at the apex, declivity commencing behind the middle, gradually convex; disc shallowly striate-punctate, the punctures large, extremely shallow, disclosing the bottom, interspaces flat, about twice as wide as the diameter of the striae punctures, each interspace with a row of smaller more remotely placed punctures on a

feebly raised line, each puncture with a short stout erect pale yellowish scale, remaining surface of the interspaces irregularly reticulate, thus producing a subshining rather rough appearance of the entire elytra; declivity with the scales somewhat larger, first and last visible sternite subequal in length, much longer than the third or fourth, the second but little longer than the first.

Apart from the types I have not seen any specimens.

***Erioschidias queenslandi*, n. sp.**

Yellowish-brown, 1.7 mm. long, 2.4 times as long as wide. From *E. setistriatus* Lea easily separated by the size, sculpture and general shape.

Front opaque, plano-convex, densely minutely punctulate, flattened in the median half. Eyes short oval, emarginate in front. Antennae with the third segment extremely small, club circular in outline, pubescence rather dense, sensitive pores numerous.

Pronotum wider than long, base bisinuate, postcro-lateral angles rectangular, rounded when viewed from above,

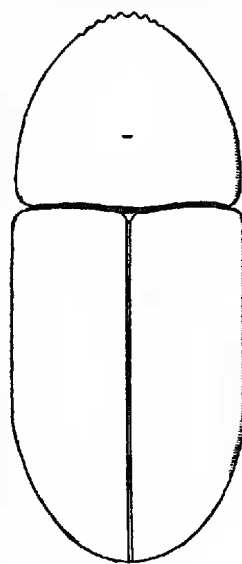


Fig. 10

***Erioschidias*
queenslandi, n. sp.,
dorsal aspect**

sides arcuate and convergent on more than the basal half, anterior margin rather narrowly rounded, armed with numerous small asperities; summit behind the middle, anterior area obliquely convex, densely covered with small asperities which are not connected at their bases to form concentric ridges, posterior area densely roughly granulate punctate. Scutellum small.

Elytra shining, but little wider and 1.8 times as long as the pronotum, humeral angles feebly rounded, sides parallel on the basal half, apex narrowly rounded, declivity commencing at the middle, gradually declivous; disc with rows of hardly visible shallow punctures, interspaces flat, apparently uniseriately minutely punctate, on the declivity these punctures replaced by small very densely placed granules, from the interspacial punctures and granules respectively arise short erect yellowish hair-like bristles.

Types in the South Australian Museum and in the author's collection.

Locality—Cairns district, A. M. Lea.

HYPOTHENEMUS (CRYPHALUS) TANTILLUS Lea

Redescription of the Type—Yellowish-brown, 1.0 mm. long, 2.4 times as long as wide. One of the smallest species of the genus.

Front convex, feebly transversely depressed below, densely rugose, sparsely hairy, with a faint median tubercle.

Pronotum wider than long (38:32), base feebly bisinuate, postero-lateral angles feebly rounded, sides and apex conjointly rounded, anterior margin armed with four recessed asperities; strongly globose, summit at the middle, followed by a distinct transverse depression, anterior area strongly convex, with numerous low asperities, posterior area very densely rugosely punctured, pubescence short but rather dense. Scutellum small, indistinct.

Elytra as wide and not quite twice as long as the pronotum, sides parallel, broadly rounded behind, declivity commencing behind the middle, evenly convex; disc lineate-punctate, the punctures shallow and moderately large, separated from each other by half

of the diameter of one puncture, interspaces flat, finely punctulate, therefore subshining, not much wider than the rows of punctures, each puncture bears a small inclined yellowish hair, two rows of similar incon-

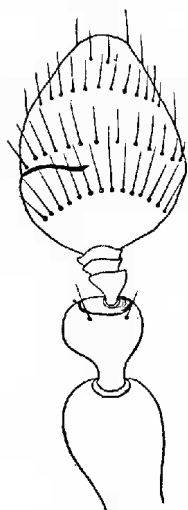


Fig. 11.
Hypothenemus
(*Cryphalus*)
tantillus Lea,
antenna.

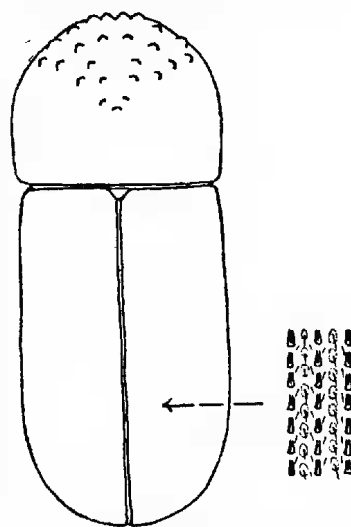


Fig. 12
Hypothenemus (*Cryphalus*)
tantillus Lea,
dorsal aspect and detail of
elytral sculpture

spicuous hairs on the interspaces close to the main striae, in the middle of each interspace with a row of pale yellow erect and rather broad scales, these scales are inconspicuous on the basal half and become more and more developed towards the declivity. Apart from the type I have not seen any specimens.

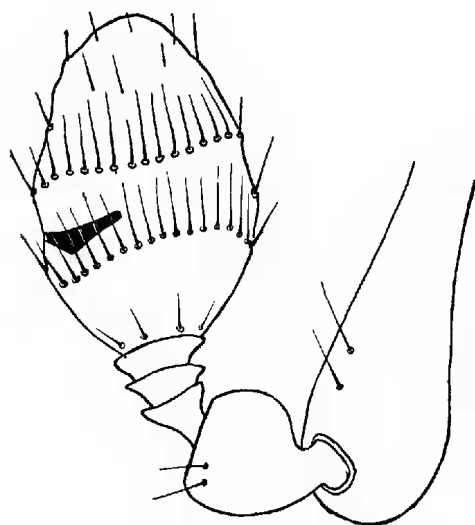


Fig. 13
Hypothenemus (Cryphalus) striatopunctatus
Lea, antenna

coarsely and very densely punctured. Scutellum distinct.

Elytra as wide and more than twice as long as the pronotum, humeral angles rounded, sides parallel on more than the basal half, rather narrowly rounded behind, declivity commencing behind the middle, gradually declivous; disc coarsely striate-punctate, the striae punctures subquadrate near the base, circular behind, interspaces narrow, convex and each with a row of scale-like hairs, these are more slender in the basal half of the elytra, broader and more like true scales behind.

The specimens recorded by the author in the Records of the South Australian Museum, 5, 1936, 527, have been misidentified. After comparison with the type they must be referred to a new species.

HYPOTHIENEMUS (CRYPHALUS)
STRIATOPUNCTATUS Lea

Redescription of the Type—Yellowish, 1.3 mm. long, 2.4 times as long as wide.

Front evenly convex, densely granulate punctate.

Pronotum wider than long (18:13), base bisinuate, postero-lateral angles rectangular, feebly rounded, sides and apex conjointly broadly arcuate, anterior margin feebly extended (not visible when viewed from above) and armed with two pointed recurved asperities medially; summit before the middle, anterior area very steep, perpendicular below, sparingly asperate on a comparatively small area, posteriorly the summit

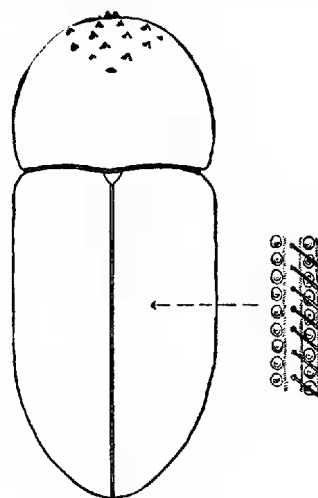


Fig. 14
Hypothenemus (Cryphalus)
striatopunctatus Lea,
dorsal aspect and elytral detail

STEPHANODERES (CRYPHALUS) MELASOMUS Lea

Redescription of the Type—Piccus, 2.1 mm. long, 2.4 times as long as wide.

Front convex, feebly transversely depressed below, minutely longitudinally wrinkled, median line shining below, with a low convexity centrally, sparsely hairy.

Pronotum wider than long (41:33), base bisinuate, postero-lateral angles obtuse and rounded, sides uniformly and broadly arcuate to the apex, summit reddish-brown, shortly before the middle; strongly globose, anterior margin with two pointed asperities, anterior area with a few similar but blunter ones below, with some smaller ones which are partly connected at their base shortly before the summit, posterior area densely rugosely punctured; rather densely covered with hairs. Scutellum very inconspicuous.

Elytra as wide and twice as long as the pronotum. sides parallel beyond the middle, obliquely narrowed behind, apex narrowly rounded, declivity commencing shortly behind the middle, obliquely convex; disc feebly striate-punctate, punctures moderate in size,

as far apart as one diameter of a puncture, the striae feebly impressed, interspaces four times as wide as the striae, somewhat irregularly triserially and finely punctured, the punctures of the median row bear small dirty yellowish erect scales, each puncture of the lateral rows a small short inclined concolorous hair; declivity with the striae strongly impressed, the interspaces strongly convex, the scales of the disc replaced by long erect dark brown and stout bristles, the hairs of the lateral rows by short brown inclined scales.

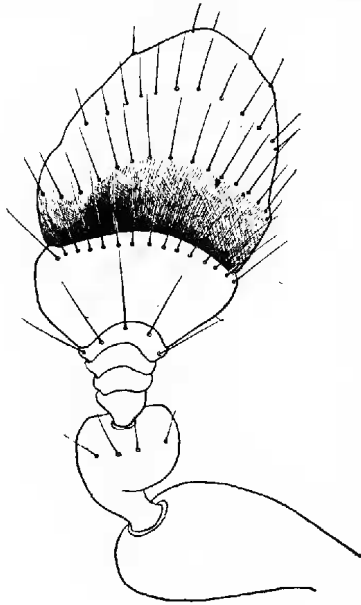


Fig. 15

Stephanoderes (Cryphalus)
melasomus Lea, antenna

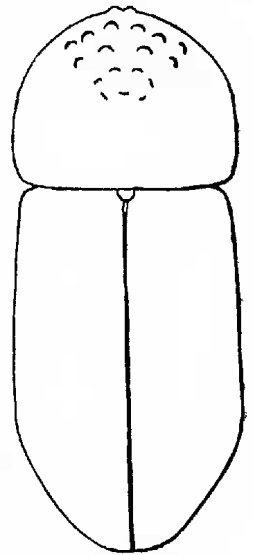


Fig. 16

Stephanoderes
(Cryphalus)
melasomus Lea,
dorsal aspect

CRYPHALUS COMPACTUS Lea

Redescription of Type—Pale yellowish-brown, 1.8 mm. long, not quite twice as long as wide. The cotype Lea mentions from the Upper Ord river is not a variety but a good species.

Front convex, densely finely granulate punctate, with short yellow pubescence.

Pronotum wider than long (29:22), widest near the base, apex narrowly rounded, apical margin armed with several small and low asperities; summit

behind the middle, anterior area steep, rather coarsely asperate, posterior area minutely punctulate.

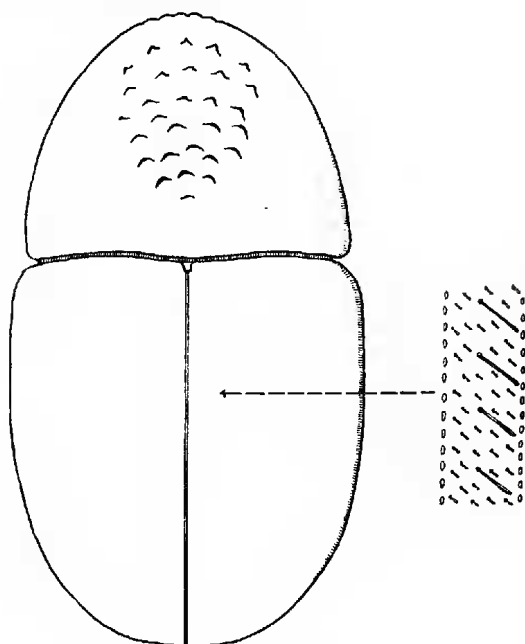


Fig. 17
Cryphalus compactus Lea
dorsal view of type and detail of vestiture

Pronotum wider than long (23:18), base feebly bisinuate, postero-lateral angles obtuse, hardly rounded, sides and apex conjointly broadly arcuate, apical margin armed with several low asperities, summit short behind the middle, rather strongly convex, anterior area densely asperate, posterior area densely punctulate.

Elytra about as wide and not quite twice as long as the pronotum, humeral angles rounded, sides parallel on the basal half, broadly and somewhat angulately rounded behind, declivity evenly convex and commencing at the middle; vestiture dark and of similar development as in *C. compactus* Lea; the striae feebly but distinctly impressed throughout.

The cotype which Lea mentions as being immature and slightly different is probably the other sex. It is somewhat more slender, the pronotum more narrowly and angulately rounded in front and the elytral scales more distinct.

Elytra as wide (30:29) and more than twice as long as the pronotum, widest at the base, broadly rounded behind, declivity uniformly convex, commencing at the middle, minutely and very densely punctured, the row hardly perceptible, vestiture double, ground scales very small and yellow, darker on the sides, uniseriate top-scales longer hair-like and somewhat darker.

Outside the type series the author has not seen any specimens.

CRYPHALUS SUBCOMPACTUS Lea

Redescription of Type — Piceus, 1.5 mm. long, 2.2 times as long as wide.

Front plano-convex, subopaque, very finely and densely punctured, with a narrow transverse carina separating vertex and frons.

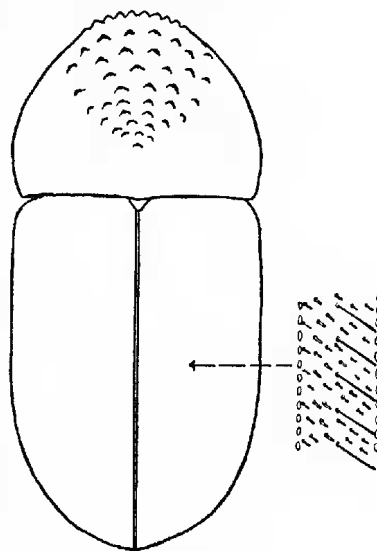


Fig. 18
Cryphalus subcompactus, Lea
dorsal aspect and elytral detail

HYPOCRYPHALUS Hopk. and DACRYPHALUS Hopk.

The generic differences between *Hypocryphalus* and *Dacryphalus* seem to me not very convincing, especially because Hopkins did not say much about the retuse elytral declivity in the description of the species. To use the number of sutures, more correctly the rows of bristles, indicating the number of sutures for separating the genera, even in a group where antennal characters are of greatest importance, will hardly prove of value. Therefore, the question still has to be settled whether both genera stand or one of them has to be withdrawn. For the present I unite the species having a 5-segmented antennal funicle, the club more or less evenly rounded in outline, and with the sutures indicated by rows of bristles on both sides of the latter under the name of *Hypocryphalus* Hopk. When more is known about the variation of the elytral sculpture, etc., and characters have been found to justify the separation in the sense of Hopkins, it will be easy to refer corresponding species to the genus *Dacryphalus* Hopk. again.

HYPOCRYPHALUS (CRYPHALUS) ASPER Broun

The Dominion Museum at Wellington and Dr. Clark of the New Zealand Forest Service have sent types and metatypes of *Cryphalus* [*Tomicus*] *asper* Broun to the author. A close examination reveals the fact that this species belongs not to the genus *Cryphalus* but to the more recently described genus *Hypocryphalus* Hopkins.

Redescription of the Species

Female—Brown, 2.3 mm. long, 2.3 times as long as wide.

Front subopaque, convex, densely granulate-punctate, eyes short oval, narrowly and shallowly emarginate in front.

Pronotum wider than long (33:25), widest at the base, the latter bisinuate, sides obliquely narrowed from the base to the apex, moderately broadly rounded in front, summit far behind the middle, anterior margin with a row of small inconspicuous asperities, anterior area obliquely ascending, with numerous low asperities, these more numerous around the summit, extending to the base at the middle, partly connected at their base thus forming broken ridges, densely punctulate on the sides behind, pubescence sparse and erect. The asperate portion laterally ceasing on nearly straight lines, which enclose an angle of about 60 degrees.

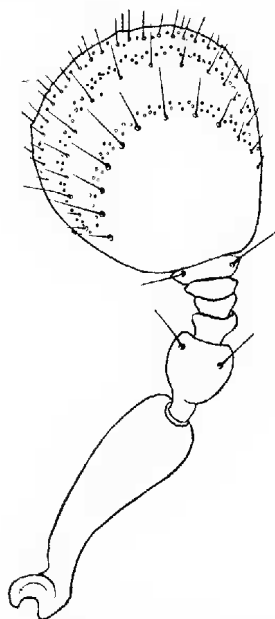


Fig. 19
Dacryphalus asper Broun
antenna

Elytra wider (35:33) and twice as long as the pronotum, humeral angles broadly rounded, sides parallel on the second and third fifth of the total length, broadly rounded behind, cylindrical, declivity commencing in the apical third,

steeply obliquely convex; disc shallowly striate punctate, striae but feebly impressed, interstices wide and shining, very densely and finely punctured; the declivity feebly impressed along the suture, lateral convexities distinct, first and second striae impressed and the punctures indistinct, the suture feebly elevated, all interstices densely covered with minute, dark and erect scale-like hairs, additional to the sparingly placed long hairs.

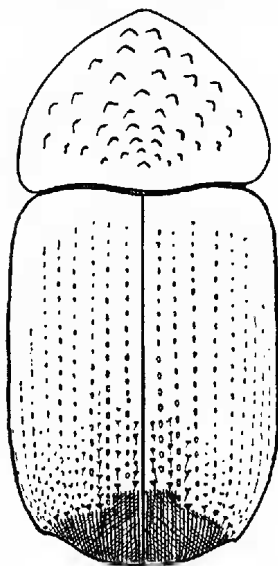


Fig. 20
Dacryphalus asper Broun,
male, dorsal aspect

Male—Of similar size and proportions, the pronotum more narrowly rounded in front, the summit higher, the asperities not so frequently connected at their bases; elytral disc with the striae more distinct, the declivity with the lateral convexities higher, gradually declivous on the first two interstices, the third abruptly ceasing and more strongly tuberculate, the others similar but lower towards the sides.

***Hypocryphalus spathulatus* n. sp.**

Reddish-brown, anterior area of the pronotum dark brown, 2.1 mm. long, 2.0 times as long as wide.

Front subopaque, feebly convex, moderately finely regularly and closely punctured, interspaces minutely punctulate.

Pronotum much wider than long, base bisinuate, postero-lateral angles hardly rounded when viewed from above, sides conjointly rounded from the base to the apex, the latter feebly extended, anterior margin with six well-developed asperities, summit in the posterior third, anterior area obliquely convex, with coarse asperities which extend not quite to the base, postero-lateral areas strongly densely punctured, pubescence sparse, short and inconspicuous. Base distinctly margined. Scutellum reduced to a hardly noticeable puncture.

Elytra as wide and 1.5 times as long as the pronotum, sides parallel to the middle, broadly rounded behind, declivity commencing at the middle, gradually convex; disc striate-punctate, punctures closely placed, striae feebly impressed, interspaces twice as wide as the striae, very densely and finely but deeply punctured, in the middle of each interspace with a more regular row of punctures which bear short erect hairs, from the other interspaces

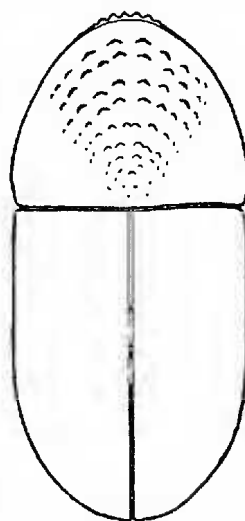


Fig. 21
Hypocryphalus
***spathulatus*, n. sp.,**
dorsal aspect

punctures arise short fine and more inclined hair-like scales, the double pubescence more distinct on the declivity.

Types in the South Australian Museum and in the author's collection.

Locality—Cairns district, A. M. Lea.

XYLEBORUS (TOMICUS) ACANTHURUS Lea

Tomicus acanthurus Lea has to be transferred to the genus *Xyleborus*. The redescription will facilitate the determination.

Female—Pale reddish-brown, 7.2 mm. long, not quite twice as long as wide.

Front convex, densely roughly punctured, eyes large and emarginate in front.

Pronotum wider than long (37:25), globose, base transverse, postero-lateral angles rectangular but not rounded, sides and apex conjointly rounded, median portion of apex feebly extended and armed with several low and blunt serrations,

summit behind the middle, anterior area steep, asperate all over, the asperites larger and more remotely placed in front, small and crowded on the summit behind. Scutellum large, triangular and polished.

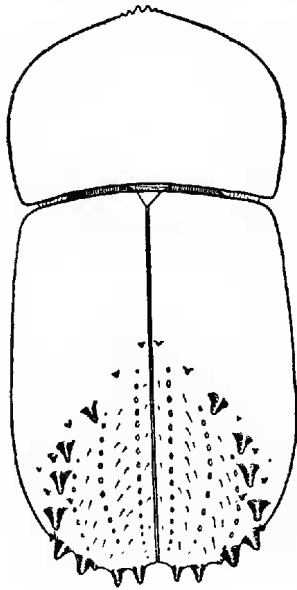


Fig. 22

Xyleborus acanthurus Lea,
female, dorsal view

Elytra feebly wider (39:37) and twice as long as the pronotum, widest in the median third, broadly rounded behind, declivity commencing before the middle, broadly sulcate-depressed, the lateral margins moderately elevated, and armed with numerous teeth, the fundus deeply striate-punctate, stria punctures moderate in size, disc-like, interspaces convex, with numerous minute setose granules; elytral disc lineate-punctate, interspaces flat, rather densely irregularly punctured, punctures of equal size to those of the striae, therefore the rows hardly perceptible. Metepisternum narrow, densely punctured, the fore coxae touching, abdominal sternites I and II equal in length, each as long as sternite III and IV together. Apart from the type, no other specimen seems to exist.

Xyleborus fijianus n. sp.

Female—Dark reddish-brown, 3.8 mm. long, twice as long as wide. A very distinct species within the *retusus-gravidus* group.

Front feebly convex, dull, rather finely punctured, interspaces minutely punctulate, impunctate along the median line, sparsely hairy except for a fringe of densely placed downwards-directed reddish hairs along the epistomal margin.

Pronotum wider than long (54:48), base distinctly bisinuate, postero-lateral angles obtuse and hardly rounded when viewed from above, sides and apex

conjointly broadly arcuate, side margins acute in the posterior half, apical margin produced downwards and armed with two pointed asperities; very strongly globose, summit in the middle, anterior area very steep, covered with numerous low and small asperities, summit transverse, posterior area very finely and densely punctured, the interspaces reticulate. Pronotum and elytra densely covered by reddish inclined hairs. Scutellum small.

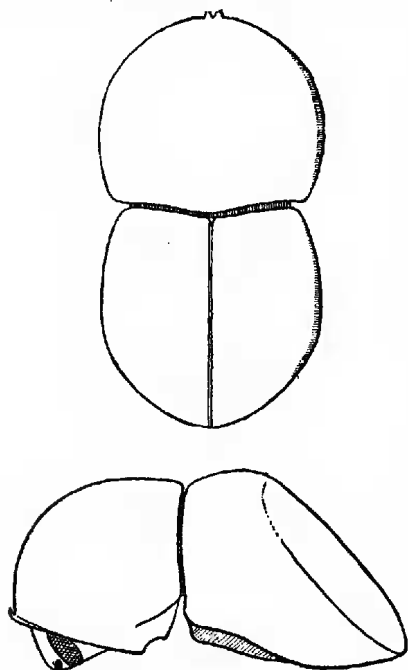


Fig. 23
Xyleborus fijianus, n. sp.,
dorsal and lateral aspect

the posterior half, the entire declivital face flattened on its greater part, feebly convex on the sides. Anterior tibiae widened distally and with numerous small serrations on the outer margin. The femur and tarsi yellow, the tibiae dark reddish-brown.

Types in the collection of the Imperial Institute of Entomology, and in my own.

Locality—Fiji Islands, Taverne Quilai, 800 feet, October 18, 1924, Dr. H. S. Evans.

***Xyleborus eucalypticus* n. sp.**

Female—Piceus, anterior half of the elytra and legs flavescens, 1.8 mm. long, 2.7 times as long as wide. This species has to be placed near *X. laevius* Egg.

Front plano convex, minutely punctulate, subshining, with a few shallow punctures and with sparse pubescence along the epistomal margin.

Elytra as wide and but little longer (51:48) than the pronotum, humeral angles strongly rounded, sides subparallel on the basal half, broadly rounded behind, declivity commencing before the middle, obliquely truncate, apical margin acute up to the seventh interspace; disc very densely, finely and irregularly punctured, without indications of rows; declivital face with the first striae impressed, but without recognisable punctures, those striae corresponding to the second and third row similarly impressed in

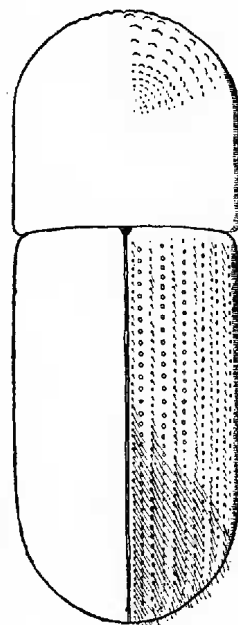


Fig. 24
Xyleborus eucalypticus, n. sp.,
dorsal aspect

Pronotum as long as wide, base feebly arcuate, postero-lateral angles rectangular and feebly rounded, sides parallel on the posterior half, broadly rounded in front, summit in the middle, anterior area feebly convex, rather densely covered by small low asperities, posterior area subshining, minutely punctulate and finely punctured, pubescence very sparse. Scutellum small, triangular.

Elytra as wide and 1.8 times as long as the pronotum, humeral angles feebly rounded, sides subparallel on more than the basal half, broadly rounded behind, declivity commencing behind the middle, uniformly convex; disc lineate-punctate, punctures very small, one from the other as far apart as the double diameter of one puncture, interspaces flat, four times as wide as the punctures of the rows, somewhat reticulate, each interspace with a row of very fine punctures which are somewhat closer placed than those of the main rows; behind the middle and on the declivity the interspatial punctures replaced by minute setose granules, the apical margin acute up to the seventh interspace.

Types in the collection of the Imperial Institute, and my own.

Locality—North Queensland, Geagana, June 15, 1934, ex *E. palmerstoni*, T. H. Smith, per R. Veitch.

NOTES AND EXHIBITS

REDISCOVERY OF THE BIVALVE *Psammobia kenyoniana* Prit. & Gat., 1904, in South Australia. This rare shell is known only from odd valves from Airey's Inlet, Victoria, a solitary valve from Tasmania and a single right valve dredged from 22 fathoms in Investigator Strait, South Australia, by Sir Joseph Verco about 40 years ago, but not identified until 1934. It is interesting to record and exhibit a second valve (left) recently dredged, 1938, by the Fisheries boat in the same locality as Verco's specimen.

B. C. COTTON

15 April 1938